Dynamic Nexus between Financial Inclusion and Economic Growth: An Evidence of Emerging Pakistan's Economy

Author's Details: [(1)] **Muhammad Raheel Hisbani**
Pursuing Masters of Business Administration (Finance) from MUISTD, Mehran University of Engineering and Technology, Jamshoro. Email: raheelmohammad66@gmail.com [(2)]**Faiza Hisbani**-PhD Scholar at MUISTD, Mehran University of Engineering and Technology, Jamshoro. Email: faizahisbani@gmail.com [(3)]**Ayaz Ahmed** - pursuing Masters of Business Administration (Finance) from MUISTD, Mehran University of Engineering and Technology, Jamshoro. Email: ahmedayaz195@gmail.com

Abstract
the nexus between the financial inclusion, economic development and poverty alleviation are widely discussed in recent era. Inclusion is the process of bringing out the left over population while financial inclusion is the strategy through which the business sector as well as individual have access to financial services that meets their needs with dignity and provides them services according to their terms. Financial inclusion includes services like insurance services, savings, payments, loans and credits. State Bank of Pakistan[1] (2015) characterized financial inclusion as admittance to financial services by firms, groups and individuals to utilized their range of product and services i.e. loan, credit, saving and insurance which address their issues gracefully.

Current study looks into the role and the impact of financial inclusion on economic growth and real GDP of Pakistan. In order to draw the results this research study used inferential and descriptive analysis applying Eviews tool. By digging out the existing literature and secondary data the significant results shows that there is a positive and strong relationship between financial inclusion factor and economic growth.
***Keywords**: Financial inclusion, Real GDP, Pakistan, Economic growth, Inclusive.*

1. INTRODUCTION

The nexus between the financial inclusion, economic development and poverty alleviation are widely discussed in recent era. Inclusion is the process of bringing out the left over population while financial inclusion is the strategy through which the business sector as well as individual have access to financial services that meets their needs with dignity and provides them services according to their terms. Financial inclusion includes services like insurance services, savings, payments, loans and credits. State Bank of Pakistan[2] (2015) characterized financial inclusion as admittance to financial services by firms, groups and individuals to utilized their range of product and services i.e. loan, credit, saving and insurance which address their issues gracefully. The World Bank[3] definition of financial inclusion comes with an additional word that is sustainability, according to World Bank, financial inclusion means the organizations, businesses, societies and individuals have effortless approach to helpful and affordable financial services and products according to their need that delivered them with responsibility and sustainability.

Financial inclusion is a key empowering part and multi-dimensional thought with different point of views prevailing all throughout the world. The apparent idea of financial inclusion is equivalent circulation of financial services towards all the individuals and society as whole that help to upgrade and uplift their work and livelihood. It has been viewed as a novel instrument for achieving maintainability, sustainability, stability of multidimensional macroeconomic activities, comprehensive monetary development, financial development that reduce poverty and improve economic growth of developing countries. Financial inclusion actually provide the

[1] State Bank of Pakistan is the central bank of Pakistan
[2] State Bank of Pakistan is the central bank of Pakistan
[3] The World Bank is a worldwide monetary organization that gives loans and grant to the low or middle income countries for pursuing capital projects.

ease to the low income population to pay their loans, invest in children`s education, savings, given loans that promote home businesses and give them credit to expand their businesses that ultimate become the reason of job creations. All the activities are related to banking sector that are responsible for economic growth of the country. Banking institutions are assumed as the important part for development of financial sector (Sharma, 2015).In Pakistan; Banking institutions are the most stable sector and have great impact on economy.

In (1912) Schumpeter was the first research who emphasis on the strong role part of the banking institutions in monetary development. The banking institutions are the efficient resource of monetary penetration and innovation because of its extensive and widespread network and accessibility of credit (Goldsmith, 1969; McKinnon, 1973). King and Levine (1993) gave observational proof for the banking institutions as a solid financial intermediation framework that is responsible for sustainable economic growth through capital aggregation. These contentions support and help to understand the solid and positive role of banking institutions in creation of funds that ultimately leads to economic growth. The correlation between the financial and economic variables developed stability of banking institution that helps to alleviate poverty and uplift the economy (Donou-Adonsou and Sylwester, 2015; and Boukhatem, 2016).

At the G20 Summit held in Seoul, South Korea, in 2010, financial inclusion was seen as one of the nine key pillars of the overall improvement plan (GPFI, 2011).the use of formal financial organizations, is a component of financial headway which got a ton of public thought and investigation premium during the 2000s, starting from an assessment disclosures that attributed dejection abatement to financial preclusion (Babajide et al., 2015; Sharma, 2016; Kim et al., 2018; Makina and Walle, 2019).

The study of Sharma (2015; 2020) was related to the role of banking institution in financial inclusion, the study of (Lal, 2018; Gunarish, Sayekti & Dewanti, 2018; Sharma, Didwania & Kumar, 2014) related to alleviate the poverty with the help of financial inclusion to economic development. There are many researches has been done in relationship with financial inclusion with economic development and poverty alleviation. Despite that there are limited studies done in context of Pakistan this research study bridges the gap and aims to see the impact of the nexus of financial inclusion to economic growth specifically in the context of Pakistan with the conceptual framework of State Bank of Pakistan (2015). The research study also adopted the model of State Bank of Pakistan (2015) as conceptual frame work and borrowed ten years data related to financial inclusive services.

This research study specifically work on three main objectives that are shown in table 1.1. The first objective of this research study seeking to know the relationship of accessibility of financial services associated with the economic growth. The second objective facilitates to know that the affordability of financial services has any influence on economic growth. The third and last objective of this research study seeks the effect of financial inclusion to the economic growth of Pakistan.

1	How does accessibility of financial services associated with economic growth.
2	How affordability of financial services influence economy to grow.
3	Does financial inclusion spur economic growth in Pakistan?

Table1.1: Research Questions
Source: Author`s Development

The rest of the research paper is organized as section 2 gives detail literature and theories of financial inclusion in relationship with economic growth and economic development. Section 3 defines and illustrates the conceptual framework of the research study and also describes research methods and material. Section 4 depict the result of the research study while at last in section 5, we have conclusion of this research study.

2. LITERATURE REVIEW

2.1 Scope of Inclusive Finance in Pakistan

Pakistan is the country of 216.6 million of peoples (PBS, 2017) in which 59% are literate (statista, 2017). Among all population with literacy rate, only 20% adult have joint or separate banks account (SBP, 2020). State Bank of Pakistan is the central bank of the country that is responsible for regulation of the monetary and credit system of Pakistan. SBP always play vital role in inclusive finance. Its strategies and policies are extremely proactive that facilitate financial inclusion. SBP achieved great number of milestones that include In 2001 Regulatory framework for MFBS, online credit information bureau (e-CIB) in 2005, Pakistan Interbank Settlement System (PRISM) in 2008 for safe and efficient payments and branchless banking regulation in 2008 that further amend in 2011. SBP also launched financial literacy program nationwide in 2012 with the methodology of Inclusion, Stability, Integrity and Protection (I-SIP) in 2014. In 2015, the first ever National Financial Inclusion Strategy was developed by SBP. The agenda was to promote financial inclusion with the help of digital financial services and targets 50% adults would have transactional account by 2022 and 65% digital transaction account by 2023. SBP launches numerous schemes and program with the help of GoP to support financial literacy which includes programs like Kamyab Jawan, Ehsaas Kifalat etc.

Despite of all these supportive and sustained effort, the level of financial inclusion is significantly poor and extremely low. According to Global Findex Survey[4] during the year of 2014-2017 only 8% increase in adult's bank account that becomes 21% in total while the growth rate of Indian financial inclusion was 27% (53% in 2014 to 80% in 2017). The reason behind the lacking if financial inclusion could be illiteracy, financial unawareness, account registration complication or poor financial infrastructure etc

3. CONCEPTUAL FRAMEWORK, RESEARCH MATERIALS AND METHODS

The basic set of financial inclusion indicator was finalized at Los Cabos Summit in 2012. All the indicators of financial inclusion were established by G20 and World Bank organization. Pakistan is one of the members of IMF, World Bank, G20 group and Alliance for financial inclusion that support the sustainable financial inclusion strategy. In Pakistan, State Bank of Pakistan proposed first ever policy and conceptual framework for financial inclusion in (2015).This research study adopted and worked on the exemplary conceptual framework model of State Bank of Pakistan that was aimed to increase the economic growth with the help of financial inclusion services. In this conceptual framework, there are financial inclusion indicator that includes i) facilitating transactions, ii) providing investment opportunities, iii) mobilizing savings and iv) facilitating inflows of foreign capitals. The financial inclusion indicator has two more independent variables that are demand and supply side. Both have five factors. The factor of supply sides is no. of banks and DFIs, No. of bank branches, ATMs, POS, and BB agent. The factors of demands sides are banked individuals, adult with credit and regulation institution, mobile transactions, saving opportunities and remittances. The financial inclusion indicator with factors of supply and demand side seeking an impact on GDP of country which is dependent on them (I.e. financial inclusion indicator, supply side, demand side).

This research study sought to explore the contextual nexus between the various indicators of supply and demand side of financial inclusion as shown in figure 3.1 that affect the economic growth and GDP of Pakistan. This study was purely quantitative in nature. The collection of data was takes place from IMF financial surveys, previous literature and WB Global Findex but the main data source was time series data from 2010 to 2019 that was available on website of State Bank of Pakistan. For the statistical analysis, this research study used Regression model with Durbin Watson test and Anova test.

[4] The **Global Findex** database is the world's most comprehensive data set on how adults save, borrow, make payments, and manage risk

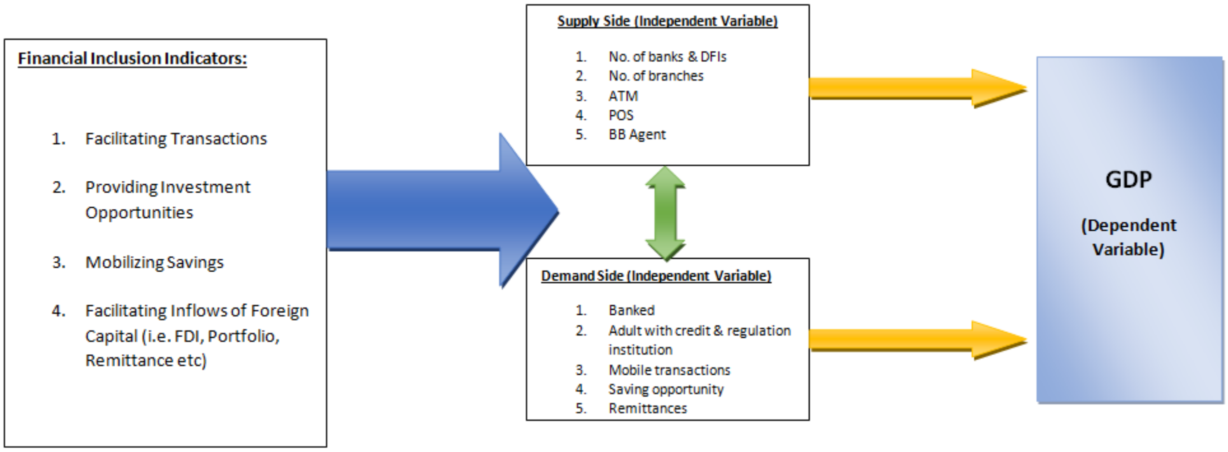

Table 1.2: Conceptual framework of research study
Source: Author`s Development

4. EMPIRICAL RESULT

This result of 1 and 2nd question of this research study shows that:

Supply Side Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.994[a]	.988	.946	.255	.988	23.707	7	2	.041	2.838

a. Predictors: (Constant), Outstanding loans from commercial banks, Outstanding small and medium enterprise (SME) loans from commercial banks (% of GDP), Outstanding loans from commercial banks (% of GDP), Number of deposit-taking microfinance institutions, Outstanding loans from commercial banks to household sector (% of GDP), Number of all microfinance institution branches per 1,000 km2, Number of ATMs per 100,000 adult

b. Dependent Variable: Real GDP
Table 4.1: Supply Side Model Summary
Source: SPSS

Demand Side Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.995[a]	.990	.969	.195	.990	47.471	6	3	.005	2.720

a. Predictors: (Constant), Value of Mobile money transactions (during % of GDP), Number of household sector loan accounts with commercial banks per 1,000 adults, Outstanding deposits of household sector with commercial banks (% of GDP), Outstanding deposits with commercial banks (% of GDP), Outstanding balances on active mobile money accounts (% of GDP), Number of active mobile money account
b. Dependent Variable: Real GDP

Table 4.2: Demand Side Model Summary
Source: SPSS

According to the table 4.1, the supply side model summary of Durbin Watson test value is 2.83 which show that there is a strong and positive correlation between the financial inclusion indicators (i.e. easy transaction, investment opportunities, mobilizing savings, and facilitating foreign inflow of capital) with the supply side variables on the GDP of Pakistan while in table 4,2, shows the test value of Durbin Watson test is 2.720. It shows there is also a positive correlation between financial inclusion indicators with demand side variable on the GDP. The result also shows that, the affordability and accessibility of the financial services to the individuals and organizations helps the economy to grow. The accessible and affordable mean of inclusive financial services have impact on economic growth of the country.
The result of 3rd question of this research study shows that:

Supply Side ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	10.770	7	1.539	23.707	.041[b]
	Residual	.130	2	.065		
	Total	10.900	9			

a. Dependent Variable: Real GDP
b. Predictors: (Constant), Outstanding loans from commercial banks, Outstanding small and medium enterprise (SME) loans from commercial banks (% of GDP), Outstanding loans from commercial banks (% of GDP), Number of deposit-taking microfinance institutions, Outstanding loans from commercial banks to household sector (% of GDP), Number of all microfinance institution branches per 1,000 km2, Number of ATMs per 100,000 adults

Demand Side ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	10.786	6	1.798	47.471	.005[b]
	Residual	.114	3	.038		
	Total	10.900	9			

a. Dependent Variable: Real GDP
b. Predictors: (Constant), Value of Mobile money transactions (during % of GDP), Number of household sector loan accounts with commercial banks per 1,000 adults, Outstanding deposits of household sector with commercial banks (% of GDP), Outstanding deposits with commercial banks (% of GDP), Outstanding balances on active mobile money accounts (% of GDP), Number of active mobile money account

The p value of supply and demand side of Anova is less than 0.05 that shows it is significant in nature. The p value of financial inclusion indicator of supply and demand side to the GDP of Pakistan is 0.41and 0.005 respectively. The result shows there is a positive correlation between independent and dependent variables. The result can also be seen as, there is significant positive influence of financial inclusion to the economic growth of Pakistan. The financial inclusion plays a vital role to spur the economic growth of the country.

6. CONCLUSION

This research study is an effort to find out the inter relationship between financial inclusion and its impact on economic growth and GDP. This research study used regression analysis to prove the linkages between financial inclusion factors such as i) facilitating transactions, ii) providing investment opportunities, iii) mobilizing savings and iv) facilitating inflows of foreign capitals to the demand and supply side. This research study also facilitates to know the impact of financial inclusion factor of demand and supply side to the GDP of Pakistan. For this purpose this research study used regression analysis with Anova. The significant result shows that there is positive and strong relationship between financial inclusion factors and economic growth. It can also said that, the sustainable economic growth can be achieved by using financial inclusion services that includes easy accessible accounts, housing and business loans, household saving deposits and accessibility of ATM's and banks. The result of this research study suggests that there is correlation between economic growth and financial inclusion as well as there is significant impact of financial inclusion on the GDP of the country.

7. RECOMMENDATION

According to the result, this research study suggested that there are three main components that are responsible for financial sector development, economic growth and GDP growth rate. These components are government regulatory policies, friendly technological advancement in financial sector such as banking and easy access of financial services.

Although technological advancement was not the subject of this research study but it would recommend that in future, the researcher could correlate the technological advancement with financial inclusion services and their impact on economic growth. Technological advancement make it ease to the organizations and individual to perform and avail financial inclusive services without any hassle. Government led friendly policies and regulatory bodies gives bank leverages to uplift and expand their services that rationally impact positive on economic growth and GDP of the country. Easy mode of services like bank account, deposit, housing finance, business loan, and credit and risk management can increase the growth of financial sector that ultimately helps to boost the economy.

References:

i *al, A. B. (2015). A.Babajide et al (2015) Financial Inclusion and economic growth in Nigeria. nternational journal of economic and financial issues.*

ii *Ali, N. F. (2019). Impact Of Financial Inclusion On Economic Growth In Pakistan. . Journal of Managerial Sciences, 13(3).*

iii *Aslam, A. (2016). Financial inclusion and its implication for inclusive growth in Pakistan.*

iv *Bank, W. (2009). Measuring Financial Inclusion. Policy Research Working Paper.*

v *Bank, W. (2018). Financial Inclusion on the Rise, But gaps Remain. Global Findex Data Base.*

vi *Bank, W. (2021). State of economic inclusion report.*

vii *Beck, T. (2012). Finance and growth–lessons from the literature and the recent crisis. LSE Growth Commision, 3, 01-06.*

viii *Beck, T. (2015). Financial inlusion measuring progress and progress in measuring.*

ix *Camara N, P. X. (2014). Factors that matter for financial inclusion.*

x *Chakarbarty, K. C. (2012, November). Financial inclusion: issues in measurement and analysis. . In irving Fisher Committee Workshop on Financial Indicators, Malaysia.*

xi *Clamara, N. P. (2014). Factors that Matter for financial Inclusion: Evidence from Peru. BBVA Research, 14/09 Working Paper.*

xii *Cresswell, G. (1979). A paradigm for developing better measures of marketing construct. Journal of marketing research. 16, (1)., 64-73.*

xiii *E.R, B. (2010). The Practice of social research . cengage learning, 52.*

xiv *Erlando, A. R. (2020). Financial inclusion, economic growth, and poverty alleviation: evidence from eastern Indonesia. Heliyon.*

xv *Fry, M. J. (1980). Money and Capital or Financial Deepening in Economic Developments? In Money and Monetory Policy in Less Developed Countries.*

xvi *Ghosh, R. D. (2013). Financial inclusion for inclusive growth of India- A study of Indian States. International Journal of Business Management and Research.*

xvii *Gulati, P. (2009). Research Managemwnt: Fundamental and applieed research,. Global india publication, 42.*

xviii *Gunarish, T. S. (2018). Financial inclusion and poverty alleviation: Evidence from Indonesia. International Journal of Economics, Business and Management research.*

xix *Gwalani, H. &. (2014). Financial Inclusion–Building a success model in the Indian context. . Procedia-Social and Behavorial Sciences, 133, 372-378.*

xx *H.R, B. (2011). Research methods in Anthropology. 5th edition, altamira press.*

xxi *Jhonson, R. &. (2010). Educational research: Qualiatative, Quantitative and mixed approaches. 4th edition, California: Sage publication.*

xxii *Julie, O. (2013). The Relationship between Financial Inclusion and GDP growth in Kenya.*

xxiii *Kumar, N. (2011). Financial Inclusion and its determinants: Evidence from state level empirical analysis in India. In Proceedings of the 13th Annual Conference on Money and Finance in the Indian Economy, Indra Gandhi Institute of Development Research, Mumbai, India.*

xxiv *Kumar, N. (2013). Financial inclusion and its determinants: evidence from India. Journal of Financial Economic Policy.*

xxv *Lal, T. (2018). Impact of financial inclusion on poverty alleviation through cooperative banks. International Jiournal of Social Economics.*

xxvi Lenka, S. &. (2017). Does financial inclusion spur economic growth in India? The Journal of Developing Areas, 51 (3),215-228.

xxvii Makina, D. &. (2019).). Financial inclusion and economic growth: evidence from a panel of selected african countries. In Extending Financial Inclusion in Africa.

xxviii Nagina Kanwal, A. z. (2019). Financial inclusion, financial statbility and sustainable economic developmentof pakistan.

xxix Nasir ali, k. f. (n.d.). Impact of financial inclusion on economic growth in pakistan.

xxx Pakistan, S. B. (n.d.). Financial Inclusion.

xxxi S., W. A. (2016). Policy analysis on financial inclusion of women in Pakistan . The Evans School review vol. 6.

xxxii SBP. (n.d.). National financial inclusion startegy.

xxxiii Schmpeter, J. (1982). The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle (1912/1934). Transaction Publishers.

xxxiv Sharma, D. (2016). Nexus between financial inclusion and economic growth: Evidence from the emerging Indian economy. Journal of Financial Economic Policy.

xxxv Suman Dahiya, M. K. (2020). linkage between financial inclusion and economic growth: An emperical study of the emeriging Indian Economy. The Journal of Business perspective.

xxxvi Tuesta D. Sorensen. G. Hring, A. a. (2015). Financial inclusion and its determinants. The case of Argentina. BBVA researchworking paper, 15/03.

xxxvii ZTBL. (n.d.). Financial inclusion in Pakistan.

xxxviii Zuzana, F. a. (2014). Understanding financial inclusion in China , Bank of Finland - institute for economies in transition (BOFIT) . University of Strasbarg, working papaer2016-06.